APPENDIX 3.8-A

Berenda Reservoir Technical Memorandum

Berenda Reservoir

TO: Karin Lilienbecker/CH2M HILL

FROM: Rob Rodland/CH2M HILL

DATE: February 1, 2012

This memorandum addresses issues associated with the Berenda Reservoir/Berenda Slough, related to the Parks, Recreation, and Open Space; Hydrology and Water Resources; and Public Utilities and Energy sections of the Merced to Fresno Section EIR/EIS. The BNSF Alternative, the Ave 24 Wye, and Kojima Development Heavy Maintenance Facility (HMF) would either cross or be located within areas associated with the reservoir/slough. The BNSF Alternative and Ave 24 Wye would be located west of the existing BNSF Railway right-of-way and Santa Fe Drive (Figure 1-1). Preliminary research indicates that the HST Project components do not affect the reservoir, but do cross the area associated with the slough.

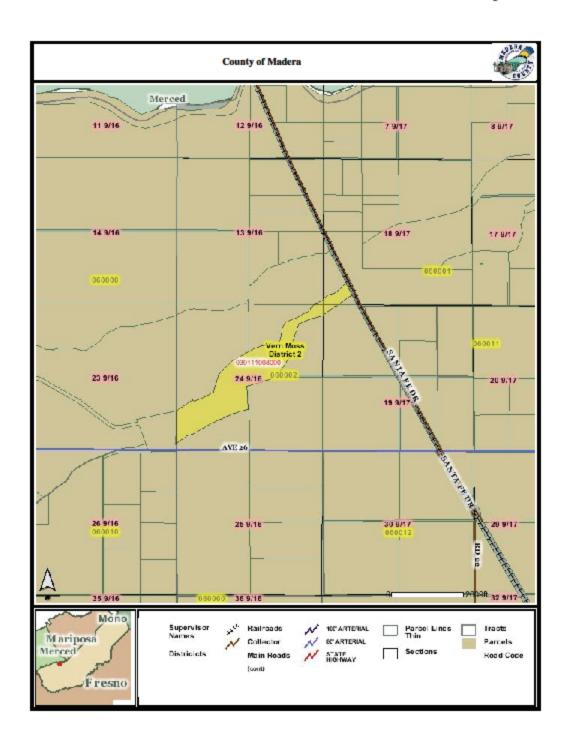


Figure 1-1
BNSF Railway and Santa Fe Drive

Ownership Information

Located within Madera County and east of the city of Chowchilla, the Berenda Reservoir is owned and operated by the Chowchilla Water District (CWD). The Madera County Assessor number for the reservoir is 030-111-008-0, and the parcel boundary identified extends east of the existing BNSF Railway right-of-way and Santa Fe Drive. Figure 1-2 illustrates the boundaries based on the data from the Madera County Assessor.

Page 1 of 1



http://63.192.182.23/parcelview/Print/PrintView.aspx

1/7/2011

Figure 1-2
Madera County Assessor Data for Berenda Reservoir

Additional research included a search of the U.S. Army Corps of Engineers National Inventory of Dams. As illustrated in Figure 1-3, the reservoir is owned and operated by CWD.

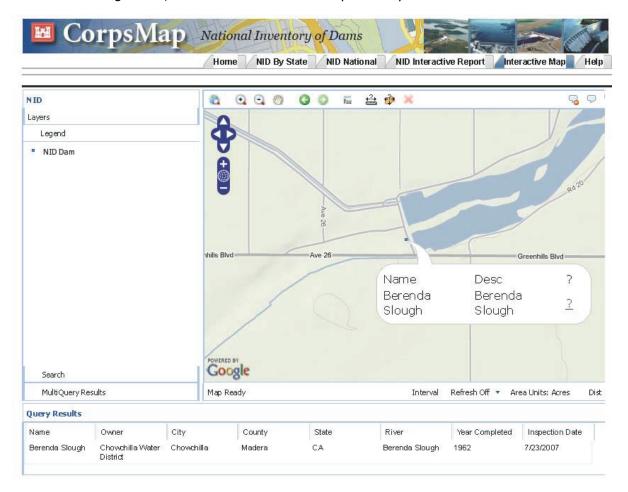


Figure 1-3 enda Reservoir

Ownership of Berenda Reservoir Source: U.S. Army Corps of Engineers (2010)

Parks Information

The City of Chowchilla has an agreement with CWD to operate the recreation facilities located within the reservoir. Recreation facilities are only used when water is in the reservoir, and can be closed for an entire season (which occurred as recently as 2009). The recreational use area ends extends only from the boat ramp to the dam on the west end of the reservoir (email communication from Ken Swanson, AECOM, December 2010). The land to the east of the boat ramp is maintained as wildlife habitat by CWD. The boat ramp is located approximately 1 mile west of where the BNSF Alternative and/or Ave 24 Wye would cross the slough and the site of the potential Kojima Development HMF. The dam is located approximately 2 miles west of the crossing.

Information on the park function of the Berenda Reservoir is available in the Chowchilla Municipal Code, available at:

(http://search.municode.com/html/16268/level3/CHOWCHILLA MUNICIPAL CODE TIT12STSIPUPL CH1 2.28BEREREPA.html).

EIR/EIS Section 3.14, Parks, Recreation, and Open Space, identified the Berenda Reservoir as being within the study area for parks; however, this was based on the property boundary for the reservoir. As

described above, the recreational use of the reservoir occurs west of the potential project components and there would be no construction or operation impacts. Section 3.14 has been be updated to reflect this new information.

Water Resources

Berenda Slough is identified in Merced to Fresno Section EIR/EIS Section 3.8, Hydrology and Water Resources, and no impacts are identified. The dam and control functions of the reservoir are west of where the crossing is located, and the slough continues west of the dam as well. No changes are necessary.

Utilities

It is unlikely that there are any issues related to utilities with the crossing of the Berenda Slough. Merced to Fresno Section EIR/EIS Section 3.6, Public Utilities and Energy, does not identify any potential high-risk utility conflicts, and identifies the Kojima Development HMF has having the fewest utility conflicts. The section also identifies a low-risk conflict associated with an irrigation canal with the Kojima Development HMF, but does identify any impacts associated with the Berenda Slough. No changes are necessary.